#### §212.1

#### Subpart E—Control of Components, Containers, and Closures

212.40 How must I control the components I use to produce PET drugs and the containers and closures I package them in?

#### Subpart F—Production and Process Controls

212.50 What production and process controls must I have?

#### Subpart G—Laboratory Controls

- 212.60 What requirements apply to the laboratories where I test components, inprocess materials, and finished PET drug products?
- 212.61 What must I do to ensure the stability of my PET drug products through expiry?

## Subpart H—Finished Drug Product Controls and Acceptance Criteria

- 212.70 What controls and acceptance criteria must I have for my finished PET drug products?
- 212.71 What actions must I take if a batch of PET drug product does not conform to specifications?

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212.80 What are the requirements associated with labeling and packaging PET drug products?

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212.90 What actions must I take to control the distribution of PET drug products?

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212.100 What do I do if I receive a complaint about a PET drug product produced at my facility?

#### Subpart L—Records

212.110 How must I maintain records of my production of PET drugs?

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#### **Subpart A—General Provisions**

# § 212.1 What are the meanings of the technical terms used in these regulations?

The following definitions apply to words and phrases as they are used in

this part. Other definitions of these words may apply when they are used in other parts of this chapter.

Acceptance criteria means numerical limits, ranges, or other criteria for tests that are used for or in making a decision to accept or reject a unit, lot, or batch of a PET drug product.

Act means the Federal Food, Drug, and Cosmetic Act, as amended (21 U.S.C.  $321 \ et \ seq.$ ).

Active pharmaceutical ingredient means a substance that is intended for incorporation into a finished PET drug product and is intended to furnish pharmacological activity or other direct effect in the diagnosis or monitoring of a disease or a manifestation of a disease in humans, but does not include intermediates used in the synthesis of such substance.

Batch means a specific quantity of PET drug intended to have uniform character and quality, within specified limits, that is produced according to a single production order during the same cycle of production.

Batch production and control record means a unique record that references an accepted master production and control record and documents specific details on production, labeling, and quality control for a single batch of a PET drug.

Component means any ingredient intended for use in the production of a PET drug, including any ingredients that may not appear in the final PET drug product.

Conditional final release means a final release made prior to completion of a required finished-product test because of a malfunction involving analytical equipment.

Final release means the authoritative decision by a responsible person in a PET production facility to permit the use of a batch of a PET drug in humans.

Inactive ingredient means any intended component of the PET drug other than the active pharmaceutical ingredient.

In-process material means any material fabricated, compounded, blended, or derived by chemical reaction that is produced for, and is used in, the preparation of a PET drug.

Lot means a batch, or a specifically identified portion of a batch, having uniform character and quality within specified limits. In the case of a PET drug produced by continuous process, a lot is a specifically identified amount produced in a unit of time or quantity in a manner that ensures its having uniform character and quality within specified limits.

Lot number, control number, or batch number means any distinctive combination of letters, numbers, or symbols from which the complete history of the production, processing, packing, holding, and distribution of a batch or lot of a PET drug can be determined.

Master production and control record means a compilation of instructions containing the procedures and specifications for the production of a PET

Material release means the authoritative decision by a responsible person in a PET production facility to permit the use of a component, container and closure, in-process material, packaging material, or labeling in the production of a PET drug.

PET means positron emission tomography.

PET drug means a radioactive drug that exhibits spontaneous disintegration of unstable nuclei by the emission of positrons and is used for providing dual photon positron emission tomographic diagnostic images. The definition includes any nonradioactive reagent, reagent kit, ingredient, nuclide generator, accelerator, target material, electronic synthesizer, or other apparatus or computer program to be used in the preparation of a PET drug. "PET drug" includes a "PET drug product" as defined in this section.

PET drug product means a finished dosage form of a PET drug, whether or not in association with one or more other ingredients.

PET drug production facility means a facility that is engaged in the production of a PET drug.

Production means the manufacturing, compounding, processing, packaging, labeling, reprocessing, repacking, relabeling, and testing of a PET drug.

Quality assurance means a system for ensuring the quality of active ingredients, PET drugs, intermediates, components that yield an active pharmaceutical ingredient, analytical supplies, and other components, including container-closure systems and in-process materials, through procedures, tests, analytical methods, and acceptance criteria.

Receiving facility means any hospital, institution, nuclear pharmacy, imaging facility, or other entity or part of an entity that accepts a PET drug product that has been given final release, but does not include a common or contract carrier that transports a PET drug product from a PET production facility to a receiving facility.

Specifications means the tests, analytical procedures, and appropriate acceptance criteria to which a PET drug, PET drug product, component, container-closure system, in-process material, or other material used in PET drug production must conform to be considered acceptable for its intended use. Conformance to specifications means that a PET drug, PET drug product, component, container-closure system, in-process material, or other material used in PET drug production, when tested according to the described analytical procedures, meets the listed acceptance criteria.

Strength means the concentration of the active pharmaceutical ingredient (radioactivity amount per volume or weight at the time of calibration).

Sub-batch means a quantity of PET drug having uniform character and quality, within specified limits, that is produced during one succession of multiple irradiations, using a given synthesis and/or purification operation.

Verification means confirmation that an established method, process, or system meets predetermined acceptance criteria.

### §212.2 What is current good manufacturing practice for PET drugs?

Current good manufacturing practice for PET drugs is the minimum requirements for the methods to be used in, and the facilities and controls used for, the production, quality assurance, holding, or distribution of PET drugs intended for human use. Current good manufacturing practice is intended to ensure that each PET drug meets the requirements of the act as to safety